

### **AMENDMENTS TO THE CLAIMS**

Please amend the claims as set forth below:

Claims 1-27 (Cancelled)

28. (New) A method comprising:
- providing an operating voltage to a processor configured to process wireless communication signals; and
  - modifying the operating voltage provided to the processor based on a mode of operation of the processor.
29. (New) A method in accordance with claim 28, further comprising determining a current mode of operation of the processor, wherein the operating voltage is modified based on the current mode of operation that is determined.
30. (New) A method in accordance with claim 29, wherein the current mode of operation is determined by sensing a level of power supplied to the processor.
31. (New) A method in accordance with claim 28, further comprising receiving a signal indicating an anticipated mode of operation of the processor, wherein the operating voltage is modified based on the signal.
32. (New) A method in accordance with claim 29, wherein the operating voltage is modified by reducing the operating voltage when the current mode of operation is determined to be a sleep mode.
33. (New) A method in accordance with claim 29, wherein the operating voltage is modified by increasing the operating voltage when the current mode of operation is determined to be an active mode.

34. (New) A method in accordance with claim 31, wherein the operating voltage is modified by reducing the operating voltage in response to the signal when the anticipated mode of operation is a sleep mode.

35. (New) A method in accordance with claim 31, wherein the operating voltage is modified by increasing the operating voltage when the anticipated mode of operation is an active mode.

36. (New) An apparatus comprising:  
a power management controller to provide an operating voltage to a processor configured to process wireless communication signals, and to modify the operating voltage based on a mode of operation of the processor.

37. (New) An apparatus in accordance with claim 36, wherein the power management controller is able to determine a current mode of operation of the processor and modify the operating voltage based on the current mode of operation.

38. (New) An apparatus in accordance with claim 37, wherein the power management controller is able to sense a level of power supplied to the processor in order to determine the current mode of operation.

39. (New) An apparatus in accordance with claim 36, wherein the power management controller is able to receive a signal indicating an anticipated mode of operation of the processor and to modify the operating voltage based on the signal.

40. (New) An apparatus in accordance with claim 37, wherein the power management controller is able to modify the operating voltage by reducing the operating voltage when the current mode of operation is a sleep mode.

41. (New) An apparatus in accordance with claim 37, wherein the power management controller is able to modify the operating voltage by increasing the operating voltage when the current mode of operation is an active mode.

42. (New) An apparatus in accordance with claim 39, wherein the power management controller is able to modify the operating voltage by reducing the operating voltage in response to the signal when the anticipated mode of operation is a sleep mode.

43. (New) An apparatus in accordance with claim 39, wherein the power management controller is able to modify the operating voltage by increasing the operating voltage in response to the signal when the anticipated mode of operation is an active mode.

44. (New) An article of manufacture comprising:  
a storage medium; and  
a set of instructions stored in the storage medium, which when executed by a power management controller cause the power management controller to perform operations comprising:  
providing an operating voltage to a processor configured to process wireless communication signals; and  
modifying the operating voltage provided to the processor based on a mode of operation of the processor.

45. (New) An article of manufacture in accordance with claim 44, wherein the operations further comprise determining a current mode of operation of the processor, wherein the operating voltage is modified based on the current mode of operation that is determined.

46. (New) An article of manufacture in accordance with claim 45, wherein the current mode of operation is determined by sensing a level of power supplied to the processor.

47. (New) An article of manufacture in accordance with claim 44, wherein the operations further comprise receiving a signal indicating an anticipated mode of operation of the processor, wherein the operating voltage is modified based on the signal.

48. (New) An article of manufacture in accordance with claim 45, wherein the operating voltage is modified by reducing the operating voltage when the current mode of operation is determined to be a sleep mode.

49. (New) An article of manufacture in accordance with claim 45, wherein the operating voltage is modified by increasing the operating voltage when the current mode of operation is determined to be an active mode.

50. (New) An article of manufacture in accordance with claim 47, wherein the operating voltage is modified by reducing the operating voltage in response to the signal when the anticipated mode of operation is a sleep mode.

51. (New) An article of manufacture in accordance with claim 47, wherein the operating voltage is modified by increasing the operating voltage when the anticipated mode of operation is an active mode.